

[4910-13-U]

## DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 14310 3/12/2001]

[Docket No. 2000-CE-67-AD; Amendment 39-12140; AD 2001-05-04]

RIN 2120-AA64

Airworthiness Directives; PIAGGIO AERO INDUSTRIES S.p.A Model P-180 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that applies to all PIAGGIO AERO INDUSTRIES S.p.A (PIAGGIO) Model P-180 airplanes. This AD requires you to inspect the flap actuators for incorrect maneuvering and evidence of grease and oxidation around the gear box (actuators with any of these conditions are referred to as problem actuators). If you find a problem actuator, this AD requires you to immediately replace the flap actuators with improved design actuators or repair the existing actuators to the improved design level. If you do not find a problem actuator, this AD requires you to repeat the inspection until the installed actuators are of improved design. This AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Italy. The actions specified by this AD are intended to detect and remove problem flap actuators from service. Continued operation with problem actuators could result in flap system failure, with consequent reduction in, or loss of, control of the airplane.

**DATES:** This AD becomes effective on April 27, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of April 27, 2001.

**ADDRESSES:** You may get the service information referenced in this AD from Piaggio Aero Industries S.p.A, Via Cibrario 4, 16154 Genoa, Italy. You may examine this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-67-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Roman Gabrys, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4141; facsimile: (816) 329-4090.

### SUPPLEMENTARY INFORMATION:

#### **Discussion**

**What events have caused this AD?** The Ente Nazionale per l'Aviazione Civile (ENAC), which is the airworthiness authority for Italy, recently notified FAA that an unsafe condition may exist on all PIAGGIO Model P-180 airplanes. The ENAC reports incidents of malfunctions of the flap actuators. Investigation of these incidents reveals problems inside the gearbox of the outboard flap actuators. Investigation results indicate incorrect maneuvering of the flap system and evidence of grease and oxidation around the gear box.

**What are the consequences if the condition is not corrected?** Continued operation with problem actuators could result in flap system failure, with consequent reduction in, or loss of, control of the airplane.

**Has FAA taken any action to this point?** We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all PIAGGIO Model P-180 airplanes. This proposal was published in the *Federal Register* as a notice of proposed rulemaking (NPRM) on January 2, 2001 (66 FR 61). The NPRM proposed to require you to:

- inspect the flap actuators for incorrect maneuvering and evidence of grease and oxidation around the gear box (actuators with any of these conditions are referred to as problem actuators);
- if you find a problem actuator, immediately replace the flap actuators with improved design actuators or repair the existing actuators to the improved design level; and
- if you do not find a problem actuator, repeat the inspection until you install improved design flap actuators.

**Was the public invited to comment?** Interested persons were afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

#### **FAA's Determination**

**What is FAA's final determination on this issue?** After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We determined that these minor corrections:

- will not change the meaning of the AD; and
- will not add any additional burden upon the public than was already proposed.

#### **Cost Impact**

**How many airplanes does this AD impact?** We estimate that this AD affects 11 airplanes in the U.S. registry.

**What is the cost impact of this AD on owners/operators of the affected airplanes?** We estimate the following costs to accomplish the inspection:

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane</b>	<b>Total Cost on U.S. Operators</b>
1 workhour X \$60 per hour = \$60.	No parts required for the inspection.	\$60.	\$60 X 11 = \$660.

We estimate the following costs to accomplish any necessary replacements that will be required based on the results of the inspection. We have no way of determining the number of airplanes that may need such repair/replacement:

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane</b>
32 workhours X \$60 per hour = \$1,920.	\$8,000 per airplane.	\$1,920 + \$ 8,000 = \$9,920.

#### **Regulatory Impact**

**Does this AD impact various entities?** The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

**Does this AD involve a significant rule or regulatory action?** For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. FAA amends § 39.13 by adding a new AD to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "av-info.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2001-05-04 PIAGGIO AERO INDUSTRIES S.p.A.:** Amendment 39-12140; Docket No. 2000-CE-67-AD.

(a) What airplanes are affected by this AD? This AD affects Model P-180 airplanes, all serial numbers, that are certificated in any category.

(b) Who must comply with this AD? Anyone who wishes to operate any of the above airplanes must comply with this AD.

(c) What problem does this AD address? The actions specified by this AD are intended to detect and remove problem flap actuators from service. Continued operation with problem actuators could result in flap system failure, with consequent reduction in, or loss of, control of the airplane.

(d) What actions must I accomplish to address this problem? To address this problem, you must accomplish the following:

Actions	Compliance	Procedures
(1) Inspect the flap actuators for incorrect maneuvering and evidence of grease and oxidation around the gear box (actuators with any of these conditions are referred to as problem actuators).	Upon accumulating 600 hours time-in-service (TIS) on the flap actuators or within the next 100 hours TIS after April 27, 2001 (the effective date of this AD), whichever occurs later.	In accordance with the ACCOMPLISHMENT INSTRUCTIONS section of Piaggio Mandatory Service Bulletin No. SB-80-0120, Original Issue: July 20, 2000.
(2) If you do not find any problem actuators, repeat the inspection until you have either:  (i) replaced all flap actuators with part number (P/N) C154183-1 and C154184-1 (or FAA-approved equivalent part numbers) actuators; or  (ii) repaired or modified the P/N C132277-3 and C132277-4 (or FAA-approved equivalent part	Within 100 hours TIS after the inspection required in paragraph (d)(1) of this AD and thereafter at intervals not to exceed 100 hours TIS.	Inspect in accordance with the ACCOMPLISHMENT INSTRUCTIONS section of Piaggio Mandatory Service Bulletin No. SB-80-0120, Original Issue: July 20, 2000. Accomplish the replacement in accordance with the instructions in the maintenance manual. Accomplish the repair or modification in accordance with instructions received from Piaggio at the address given in

numbers) to the P/N C154183-1 and C154184-1 design level.

paragraph (h) of this AD.

<b>Actions</b>	<b>Compliance</b>	<b>Procedures</b>
(3) If you find problem actuators during any inspection required by this AD, immediately replace the flap actuators with P/N C154183-1 and C154184-1 (or FAA-approved equivalent part numbers); or repair to the P/N C154183-1 and C154184-1 design level.	Prior to further flight after the inspection where you find a problem actuator.	Accomplish the replacement in accordance with the instructions in the maintenance manual. Accomplish the repair or modification in accordance with instructions received from Piaggio at the address given in paragraph (h) of this AD.
(4) Only install flap actuators that are one of the following:  (i) P/N C154183-1 and C154184-1 (or FAA-approved equivalent part numbers); or  (ii) P/N C132277-3 and C132277-4 (or FAA-approved equivalent part numbers) that have been repaired or modified to the P/N C154183-1 and C154184-1 design level.	As of April 27, 2001 (the effective date of this AD).	Not applicable.

Note 1: Inspecting the flap actuators for incorrect maneuvering involves running a complete cycle of flap extension and retraction and monitoring the time of movement and observing for abnormal noise coming from the actuator gear box. The service information describes this procedure.

(e) Can I comply with this AD in any other way? You may use an alternative method of compliance or adjust the compliance time if:

- (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate.

Note 2: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) Where can I get information about any already-approved alternative methods of compliance?  
Contact Roman Gabrys, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4141; facsimile: (816) 329-4090.

(g) What if I need to fly the airplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done in accordance with Piaggio Mandatory Service Bulletin No. SB-80-0120, Original Issue: July 20, 2000. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Piaggio Aero Industries S.p.A, Via Cibrario 4, 16154 Genoa, Italy. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(i) When does this amendment become effective? This amendment becomes effective on April 27, 2001.

Note 3: The subject of this AD is addressed in Italian AD N2000-392, dated August 7, 2000.

FOR FURTHER INFORMATION CONTACT: Roman Gabrys, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4141; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on February 26, 2001.

Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.